

## **LIVESTOCK WASTES**

### CES CATEGORIES

66605 - Livestock Wastes

### DESCRIPTION OF SOURCE CATEGORY

Organic gas emissions from decomposition of farm animal (cattle, horses, pigs, poultry, sheep and goats) manures.

### DESCRIPTION OF METHODOLOGY

Organic gas emissions from livestock wastes were estimated using emission factors from Evaluation of Emissions from Selected Uninventoried Sources in California<sup>1</sup>, Table 5-3 on page 5-7, in terms of pounds of emissions per year per head of livestock, and the number of head of each type of livestock in San Diego County in 1987.

### COLLECTION OF DATA

Estimates of the numbers of head of livestock of each type in San Diego County in 1987 were obtained from the University of California Cooperative Extension Office for San Diego County<sup>2</sup>.

### ASSUMPTIONS

1. Livestock emit at the rates indicated in Evaluation of Emissions from Selected Uninventoried Sources in California<sup>1</sup>.
2. Goats (for which no emission factors were available) were assumed to emit at the same rate as sheep.
3. Rabbits (for which no emission factors were available) were assumed to emit at a negligible rate.

### TEMPORAL VARIATIONS

Emissions from livestock wastes are uniform throughout the year and throughout the day.

### CHANGES FROM 1983 METHODOLOGY

This source category was not in previous inventories.

### COMMENTS AND RECOMMENDATIONS

Emission factors need to be developed for rabbit wastes.

REFERENCES

1. Dickson, Ronald J., Radian Corporation, Evaluation of Emissions from Selected Uninventoried Sources in the State of California, prepared for ARB, (4/88).
2. Weisheit, Herbert W., Farm Advisor for Dairy, Livestock, Poultry, and Forage Crops, University of California Cooperative Extension Office for San Diego County.

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